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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/716,721	11/20/2000	Thomas Edward Horlander	RCA 89,324 / PU000125	9573
24498 7590 04/02/2007 JOSEPH J. LAKS, VICE PRESIDENT THOMSON LICENSING LLC PATENT OPERATIONS PO BOX 5312 PRINCETON, NJ 08543-5312			EXAMINER HO, CHUONG T	
			ART UNIT	PAPER NUMBER
			2616	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/02/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/716,721

Applicant(s)

HORLANDER ET AL.

Examiner

CHUONG T. HO

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,5,6,8 and 9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,6,8,9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

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1. Amendment filed 01/16/07 have been entered and made of record.
2. Applicant's arguments with respect to claims 1,3,5, 6, 8-9 have been considered but are moot in view of the new ground(s) of rejection.
3. Claims 1, 3, 5, 6, 8-9 are pending.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 5, 6, 8, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (6,151,334) in view of Suemura et al. (5,887,039).

As to claim 1, Kim et al. discloses a serial-to-parallel converter (figure 8, Serial-to-parallel converter 72) having input coupled to said signal serial data line (figure 8, line 28) and adapted to receive time-division multiplexed serial data (figure 2, multiplexor 48) from a plurality of data sources (figure 2, 26a, 26b, 26c...26n, col. 5, lines 63-65); and enable logic (figure 8, stream selector 76) having an input coupled to at least one control line for receiving a data valid signal (col. 12, lines 45-55, encoded word) that identifies which of said plurality of devices (video decoder 80a, decoder 80b, decoder 80c, decoder 80c,....decoder 80n) is associated with a particular packet of the time-division multiplexer serial data (col. 12, lines 45-55, the stream selector 76 receive the encoded words (data valid)...the stream selectors 76 detects special words (data valid) and directs the words to the appropriate channels (video decoder 80a, decoder 80b,

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decoder 80c, decoder 80c,...decoder 80n) by controlling the de-multiplexor 74), said enable logic (figure 8, stream selector 86) deriving (detect) from said data valid signal (encoded word) to enable said identified device (video decoder 80a, decoder 80b, decoder 80c, decoder 80c,...decoder 80n) to receive said particular packet in parallel form, as provided by said serial-to-parallel converter (figure 8, 72).

However, Kim et al. are silent to disclosing said serial-to-parallel converter having a plurality of parallel output line for providing thereon a packets of said time-division-multiplexed serial data in parallel form to a plurality of devices associated with data applications.

Suemura et al. disclose said serial-to-parallel converter (figure 2, serial-to-parallel converter 14) having a plurality of parallel output line for providing thereon a packets of said time-division-multiplexed serial data (time division multiplexed data 21) in parallel form to a plurality of devices (figure 2, decoder 19 "ch.0, ch.1, ch.2, ch.3) associated with data applications; enable logic (figure 2, sync detector, controller) having an input coupled to said at least one control line for receiving a data valid signal (the pattern) that identifies which of said plurality of devices (figure 2, decoder 19 "ch.0, ch.1, ch.2, ch.3) is associated with a particular packet of the time division multiplexed serial data (figure 2, 13), said enable logic (figure 2, sync detector, controller) deriving a signal from said data valid (pattern) to enable said identified device (figure 2, decoder 19 "ch.0, ch.1, ch.2, ch.3) to receive said particular packet in parallel form, as provided by said serial-to-parallel converter (figure 2, serial-to-parallel converter 14) (col. 7, lines 60-67, col. 8, lines 1-7).

Thus, it would have been obvious to one of ordinary skill in the art at time of the invention to incorporate said serial-to-parallel converter having a plurality of parallel output line for providing thereon a packets of said time-division-multiplexed serial data in parallel form to a plurality of devices associated with data applications taught by Suemura into the system of Kim. One would have been motivated to do so to adopt for a pattern detection circuit for each channel (application devices). Therefore, the combined system would have been eliminated ineffective packets.

6. As to claim 6, Kim et al. discloses time-division multiplexing (figure 2, multiplexor 48) the serial compressed data from the plurality of data source (figure 2, 26a, 26b, 26c,...,26n) to generate time-division multiplexing serial compressed data comprising packets on said single data line (figure 2, line 28); providing to said at least one control line at least one data valid signal (encoded word) that identifies which of said plurality of devices (figure 8, video decoder 80a, decoder 80b, decoder 80c,..., decoder 80n) is associated with a particular one of said packets (col. 12, lines 45-55); receiving from said at least one control line said at least one data valid signal (encoded words); and deriving signal from said at least one data valid signal (encoded words) to enable said identified device (video decoder 80a, decoder 80b, decoder 80c, decoder 80c,...decoder 80n) to receive said outputted packet of parallel data data (col. 12, lines 45-55, the stream selector 76 receive the encoded words (data valid)...the stream selectors 76 detects special words (data valid) and directs the words to the appropriate channels (video decoder 80a, decoder 80b, decoder 80c, decoder 80c,...decoder 80n) by controlling the de-multiplexor 74).

However, Kim et al. are silent to disclosing converting said particular one of said packets to a packet of parallel data, and outputting said packet of parallel data for receipt by said identified device.

Suemura et al. disclose converting said particular one of said packets to a packet of parallel data, and outputting said packet of parallel data for receipt by said identified device ((figure 2, serial-to-parallel converter 14) having a plurality of parallel output line for providing thereon a packets of said time-division-multiplexed serial data (time division multiplexed data 21) in parallel form to a plurality of devices (figure 2, decoder 19 "ch.0, ch.1, ch.2, ch.3) associated with data applications).

Thus, it would have been obvious to one of ordinary skill in the art at time of the invention to incorporate said serial-to-parallel converter having a plurality of parallel output line for providing thereon a packets of said time-division-multiplexed serial data in parallel form to a plurality of devices associated with data applications taught by Suemura into the system of Kim. One would have been motivated to do so to adopt for a pattern detection circuit for each channel (application devices). Therefore, the combined system would have been eliminated ineffective packets.

7. In the claim 3, Kim et al. disclose a request control circuit (figure 2, control code generator) adapted to output at least one request signal that requests the time-division multiplexed serial data for at least one of the plurality of devices associated with data applications (col. 6, lines 58-64).

8. In the claim 5, Kim et al. discloses a request control circuit (figure 2, control code generator) is further adapted to encode the at least one request signal to correspond to

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more than one of the plurality of devices associated with data application (col. 6, lines 58-64).

9. In the claim 8, Kim et al. disclose the step of encoding a data valid (control words) to indicate that the time-division multiplexed serial compressed data is valid for more than one of devices (decoders 80a, 80b, 80c,..., 80n) associated with data applications (col. 6, lines 58-64).

10. In the claim 9, Kim et al. discloses the step of encoding a request signal to indicate that the time-division multiplexed serial compressed data is requested by more than one of the devices (decoders 80a, 80b, 80c,..., 80n) associated with data applications (col. 6, lines 58-64).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG T. HO whose telephone number is (571) 272-3133. The examiner can normally be reached on 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

03/19/07



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